

"Hard Networks, Soft Networks"
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Technology in school is a hot topic of discussion these days. "Technology" in this context is synonymous with computers and telecommunications. Schools are being asked to enter the information age by investing in more computers per child and acquiring connections to the information superhighway. We will soon be seeing the appearance of "hard" networks, called Wide Area Networks (LANs) and Wide Area Networks (WANs). Important as these are, though, they achieve no educational goals in and of themselves; they simply provide an infrastructure for essential learning. Other kinds of "soft" networks are needed to reach the expectations promised by technology.

Incorporating "hard" networks and other technologies requires important changes, particularly in the area of staff development. Teachers must play a greater role in influencing their own development and that of their peers. The reason for this is quite simple: while there is much agreement that technology integrated into curriculum is a good thing, there is less direction about how it should take place, what it will look like, how long it will take, and how much it will cost. It is unlikely that sufficient resources for staff development in technology will be found.

There is hope, however, in the very nature of telecommunications technologies. Applications invite the user to join networks of other users with like interests. New resources, instructional strategies, curriculum, educational software, assessments -- just about any area of education can be discussed in cyberspace. If this can be done with colleagues across the country, even across the world, why can't frequent dialogue be encouraged with colleagues across the hall in the same school? The problem of teacher isolation has often been too low a priority, but the new technology demands that it end. Moreover, school administrators at the school site or district level, charged with responsibility for staff development, must enable their teachers to be partners in reform, rather than targets of reform.

Staff development should be a joint effort by teachers and administrators because both are stakeholders. In technology, teachers should take a leadership role in defining training areas and forming networks to develop their skills. Teachers should also realize that inadequate funding can almost be expected. Teachers, recognizing that technology accelerates changes in school curriculum and that district/state/federal resources are slow to anticipate areas requiring staff support, should form their own networks to focus on subject areas, software, hardware, telecommunications, other technical areas -- whatever will enhance their skills. Dialogue among teaching professionals will be increasingly important as the use of technology evolves. Hence, "soft" networks -- defined and directed by teachers and using the best tools of the information age -- are needed to achieve a transformation of school curriculum, instructional delivery, and learning structures.